



EXPRESS MAIL LABEL NO. EV303719219US  
PATENT CASE NAME/NO. JPA-1 1284\_001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Jon D. Pearson

Serial No: 10/775,634

Filing Date: 02/10/2004

Title: INFLATABLE DEVICE FOR  
ADJUSTING THE SUPPORT  
AND COMFORT OF A  
MATTRESS

Group Art Unit: 3671

Examiner: Tara L. Mayo

**RESPONSE TO OFFICE ACTION**

MAIL STOP AMENDMENT  
Commissioner for Patents  
Alexandria, VA 22313-1450

**DECLARATION UNDER 37 CFR § 1.132**

In response to the Office Action dated November 1, 2004, I, Jon Pearson, hereby declare and say as follows:

**BACKGROUND INFORMATION**

1. I am the owner of Jon Pearson Analytics, LLC of Mt. Airy, Maryland, and I am the sole inventor of the invention disclosed in the present application, Ser. No. 10/775,634. My *curriculum vitae*, which describes my education, employment and other expert qualifications, is attached hereto as Exhibit 1.
2. I have worked on this invention for at least 1 year, researching and developing, and testing prototypes.
3. I have read and understood patent application Ser. No. 10/775,634, including the specification and claims. I have also read and understood U.S. Pat. No. 6,665,898 issued to Gordon, U.S. Pat. No. 6,460,209 issued to Reeder *et al.*, and U.S. Pat. No. 5,787,531 issued to Pepe, cited by the Examiner in this case in support of the anticipation and obviousness rejections of the claims.

4. Based on my analysis of the contents of the aforementioned documents, as well as my knowledge of the art, I have formulated certain opinions regarding the alleged anticipation and obviousness of the claims.
5. The standard I used for anticipation was whether a single prior art reference discloses each and every element or limitation of a claim. The standard I used for obviousness was whether the combination of references cited by the Examiner would teach or suggest to a person of ordinary skill in the art each and every element or limitation of a claim, whether the prior art teaches or suggests a motivation to combine or modify the references as suggested by the Examiner, and whether a person of ordinary skill in the art would have a reasonable expectation of success.

**Figures 3A and 3B Are Not Prior Art**

6. The Examiner objected to the drawing, stating that Figures 3A and 3B should be designated by a legend such as –Prior Art– because only that which is old is illustrated.
7. Figures 3A and 3B identify problems that are solved by my invention. To the best of my knowledge, the subject matter of Figures 3A and 3B is not disclosed in the prior art.

**Claims 1-3, 7-9 and 13-18 Are Not Anticipated by Gordon**

8. Claims 1-3, 7-9 and 13-18 were rejected as being anticipated by Gordon. Independent claims 1, 7 and 13 each recite an apparatus for adjusting a mattress, said apparatus having, *inter alia*, a substantially convex cross-sectional shape, and a material and constitution for maintaining the convex shape under the weight of the mattress and a person.
9. Gordon does not disclose, teach or suggest an apparatus having a substantially convex cross-sectional shape, and a material and constitution for maintaining the convex shape under the weight of the mattress and a person, as claimed.
10. The apparatus of Gordon does not have a substantially convex cross-sectional shape, and simply cannot maintain a substantially convex cross-sectional shape, particularly under the weight of a mattress and a person. Therefore, Gordon does not disclose each and every limitation of independent claims 1, 7 and 13.
11. At first glance, Gordon (see Exhibit 2, US Patent #6,665,898 Figure 3B) does appear to show a 2-dimensional ellipse, which could suggest a convex shape. However, after developing and testing prototypes, I concluded that Gordon's disclosure does not have a suitable design to allow for the construction or maintenance of the required (convex) shape, especially under pressure. In short, Gordon's disclosure simply has nothing in it that would create or maintain this shape. The lack of methods for maintaining the convex

shape causes all of Gordon's art to purport a seriously flawed and unstable product that would be of little supportive benefit.

12. The diagrams in Exhibit 2, attached hereto (based on Figures 3A and 3B of the present application), illustrate the inherent instability that would plague Gordon's invention. Without the structural designs shown in my disclosure, the squishing of air out of one area and into another area, as the pressure of a person was applied, would cause the device to be flat where the pressure is and balloon up where there was less pressure. This phenomenon would not only reduce the effectiveness of the product, but in Gordon's case, exacerbate the problem of a pitted mattress, due to the ballooning up of areas as shown by arrows 13.
13. Referring now to Figure 5 from Gordon, in attached Exhibit 2 Page 2 I added arrows for illustrative proposes. If a person lies on the bed, creating additional pressure, the air will leave that side and balloon up on the other side. The movement of air is shown by the arrows.
14. Referring now to Figure 6 from Gordon, in attached Exhibit 2 Page 2 I added the dotted line area, which shows greater pressure in the upper body and torso region. Again Gordon's device would not maintain its shape, because air would be squeezed to the bottom. Even figures 7 and 8 from Gordon, in attached Exhibit 2 Page 3 which include additional chambers would be relatively ineffective under the weight of a person.
15. The present patent (Exhibit 2 Page 4) application discloses designs and methods that would work under pressure, because the invention's structural features provide the support necessary to maintain the critical convex shape, even while under pressure.
16. Exhibit 2, US Patent #6,665,898 Figure 3B of Gordon, showing a 2 dimensional ellipse, does not anticipate the claimed convex shape, because nowhere does Gordon's disclosure even mention the shape, and none of the descriptions or drawings provide any reasonable basis to assert that this shape would be produced and maintained, particularly under the weight and pressure of a mattress and person. Thus, Gordon's disclosure does not teach the claimed invention or enable its practice.

#### **Claims 1-3, 7-9 and 13-18 Are Not Obvious**

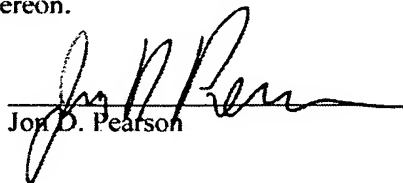
17. Claims 4, 5, 10 and 11 were rejected as being obvious over Gordon in view of Reeder *et al.* (US 6,460,209). Claims 6 and 12 were rejected as being obvious over Gordon in view of Pepe *et al.* (US 5,787,531). As noted above, Gordon's disclosure does not teach the claimed invention or enable its practice. Therefore, the claims cannot be obvious over Gordon standing alone.

18. Furthermore, neither Reeder nor Pepe cure the deficiencies of Gordon, because none of the cited references teach an apparatus for adjusting a mattress, said apparatus having a substantially convex cross-sectional shape, and a material and constitution for maintaining the convex shape under the weight of the mattress and a person. Thus, the claims cannot be obvious over the cited combinations of Gordon and Reeder or Gordon and Pepe.
19. Figure 9, 10, and 11 show what would actually happen to a single chambered device (A) When put between a mattress and box spring. The device could actually start out with a "convex" shape, as shown in figure 9.
20. Notice that the mattress sags, but the box spring (being fairly ridged) does not sag (B).
21. What is not obvious is what happens in figure 10. When the single chambered device is put between the mattress and box spring, it immediately loses shape, becoming relatively flat. This occurs because the weight of the mattress in the middle (sagging) section (D) is virtually the same as the weight in areas (C) and (E). It would not maintain the shape as shown by US Patent #6,665,898 (Gordon) Figure 3B, even with no additional weight from a person lying on top of the mattress.
22. Further more, when added weight (F) is applied as shown in figure 11, the device becomes very unstable by forcing air to the other end of the chamber.

### CONCLUSION

19. Based on the foregoing facts, it is clear that the claims in the present application cannot be anticipated by or obvious over the prior art of record.
20. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 1/24/05

  
Jon D. Pearson

## Exhibit-1



### Jon D Pearson

17112 Spring Hollow Ct. Mt. Airy, MD Phone: (410) 489-5155

## Sales & Business Analysis

An accomplished professional with more than 17 years of experience in data analysis, reporting and system development. Excellent teaching and supervisory skills. A great ability to develop clear reporting systems and analytical tools to revolutionize company's abilities to track, analyze and forecast their business.

### Areas of Expertise

- |  |   |
|--|---|
| > Sales Territory Analysis                           | > Statistical Provider Profiling              |
| > Automated Contract Profitability Analysis          | > Automated Capitation Reconciliation Systems |
| > Systematic Sales Compensation Systems              | > Clear User-friendly Reporting Systems       |
| > Push-button Internal Utilization Reporting Systems | > Sales and Business Forecasting              |
| > Questionnaire Development and Analysis             | > Ad-hoc Reporting and Analysis               |
| > Automated Market Penetration Analysis Tools        | > Experienced With Less Than Perfect Data     |
|  | > Inventory Management Tools                  |

### Employment History

#### **Walker and Associates** (Welcome, NC) 2000 - 2002

Telecommunication equipment reseller, Kitting and Integration provider.

##### **Manager - Sales and Operations Analysis**

- Automated the jobs of two data analysts within the first month to allow them to move on in their careers.
- Developed numerous reporting and analysis systems for Sales, Strategic Development, Marketing, Materials Management and Corporate executives.
- Overall greatly enhanced the companies ability to get answers, get results and manage it's business.
- Tools: Access, Excel, Access Visual Basic, Excel Visual Basic, PeopleSoft, Oracle SQL.

#### **Apria Healthcare** (Costa Mesa, CA) 1997 - 2000

Nation wide \$900,000,000/year company - Sells home oxygen and IV therapy and home medical equipment.

##### **Manager - Sales Analysis**

- Designed and developed the companies first customer reporting system.
- Developed sales compensation reporting systems.
- Developed internal Sales analysis tool relied upon by field sales across the country.
- Developed automated map-based sales territory maintenance and analysis tool.
- Developed a set of integrated Contract analysis tools that revolutionized the speed and profitability of contracting.
- Developed a tool to calculate product pricing.
- Developed an automated market penetration reporting system.
- Developed systems for prospectively estimating capitation rates and retrospectively reconciling capitation contracts.
- Developed mapping tool to help efficiently schedule sales calls.
- Overall greatly enhanced the companies ability to profitability run it's business.
- Tools: Access, Excel, Access Visual Basic, Excel Visual Basic, AS/400 Query, Mapinfo, and Avenir.

#### **Allmerica Financial** - (Worcester, MA) 1992 - 1997

PPO and Indemnity Health Insurance Company with a national sales force.

##### **Manager - Analytic Services**

- Managed two person department responsible for 60 - 80 ad-hoc information requests per month.
- Developed nation wide mainframe reporting system to allow sales personnel (nation wide) to order reports and get instant on-screen information.
- Case mix adjusted state hospital admission data to produce efficiency indexes for average length of stay, charges per day, and charges per stay.
- Developed Utilization Review tracking system to report nurse utilization and savings for six programs.
- Tools: SQL, Business Objects, Easytrieve, Excel, Lotus, GeoNetworks, and MVS-Rexx.

#### **Central Massachusetts Health Care** - (Worcester, MA) 1990 - 1992

Local HMO Insurance Company with approximately 100,000 members.

##### **Health Services Analyst**

- Developed a provider profiling outlier analysis system to identify statistically aberrant medical specialists.
- Dramatically increased the quality and availability of sophisticated information throughout the company.
- Tools: SQL(Ingress), RBF, Excel, SAS, and SAS/Graph.

#### **US Healthcare** - (Blue Bell, PA) 1985 - 1990

National HMO Insurance Company with approximately 1,000,000+ members.

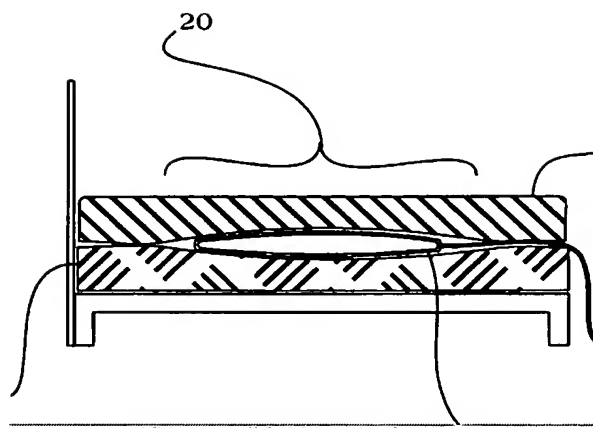
##### **Senior Financial Analyst**

- Developed and programmed mainframe reporting system to greatly increase the speed and consistency of information.
- Designed a method for statistically forecasting membership trends.
- Designed and taught courses in the use of reporting tools.
- Supervised 3 data processing employees; a Statistical Analyst, a Programmer Analyst, and a Data Control Clerk.
- Tools: Dbase, Basic, Excel, Roscoe, SAS(US Healthcare's SAS Software consultant), Cobol, Easytrieve, Culpit.

### Academic Credentials

**B.S. Quantitative Business Analysis** - Pennsylvania State University, 1984

Exhibit-2 Page-1



US Patent #6,665,898 Figure 3B

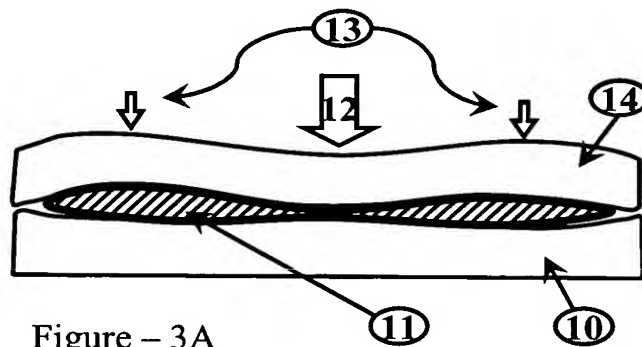


Figure - 3A

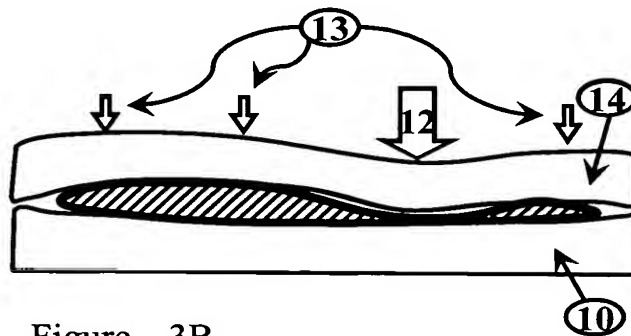
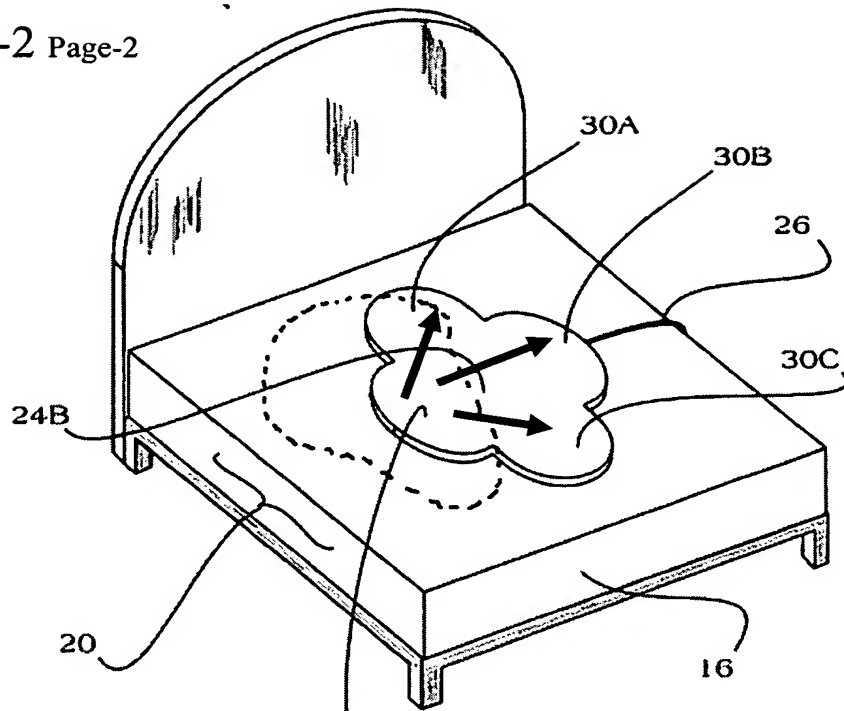
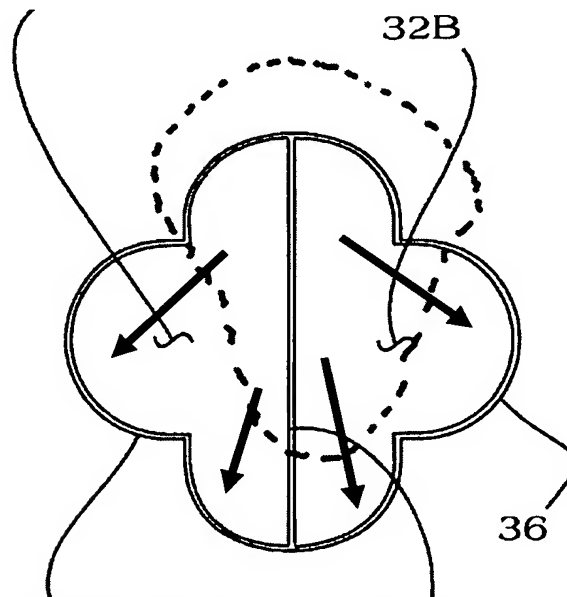


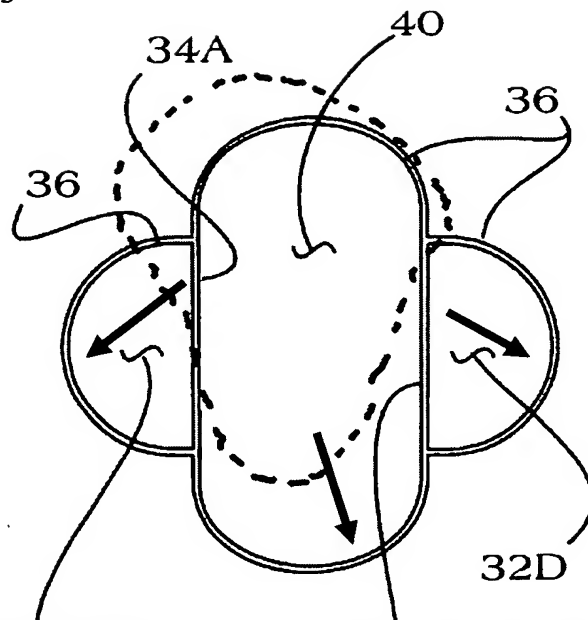
Figure - 3B



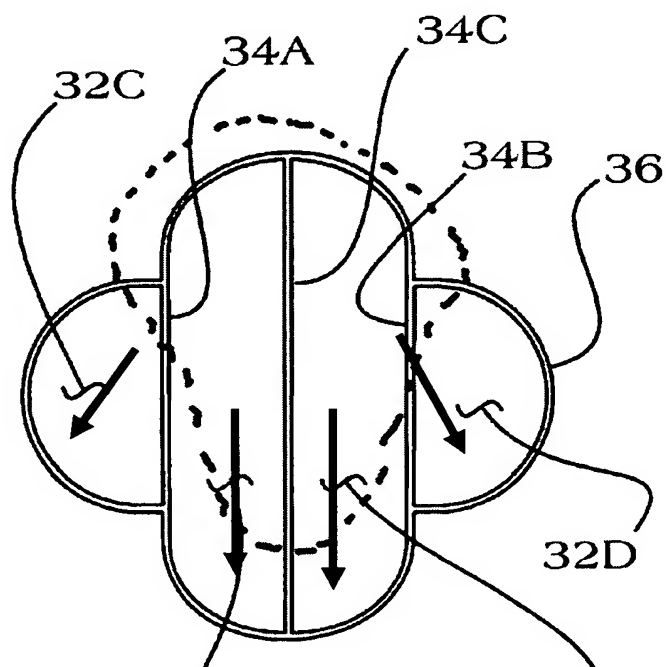
US Patent #6,665,898 Figure 5 (with added arrows and dotted outline)



US Patent #6,665,898 Figure 6 (with added arrows and dotted outline)



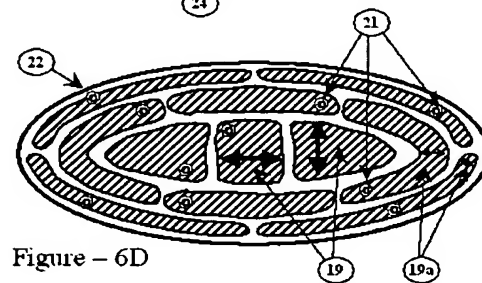
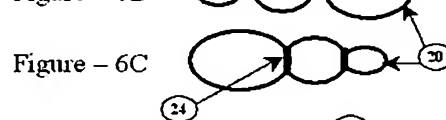
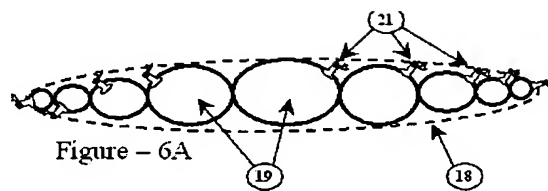
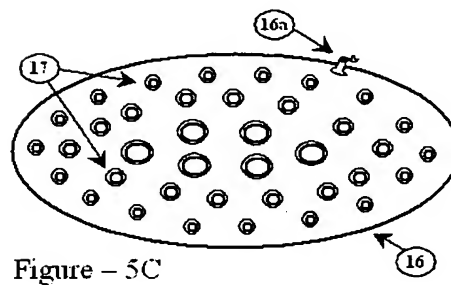
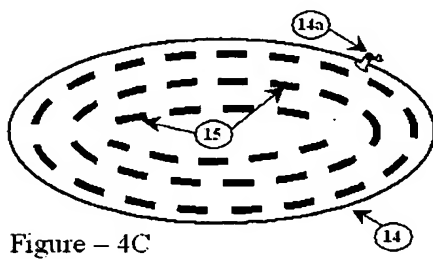
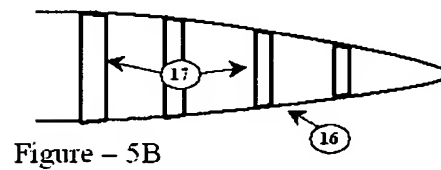
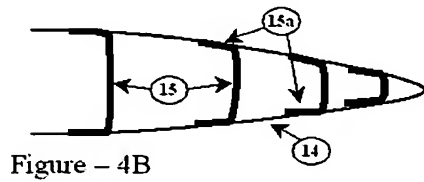
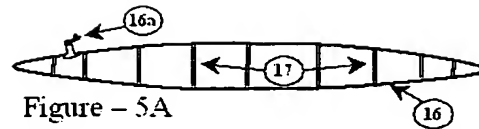
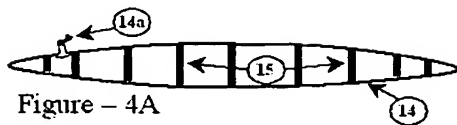
US Patent #6,665,898 Figure 7 (with added arrows and dotted outline)



US Patent #6,665,898 Figure 8 (with added arrows and dotted outline)



# Exhibit-2 Page-4



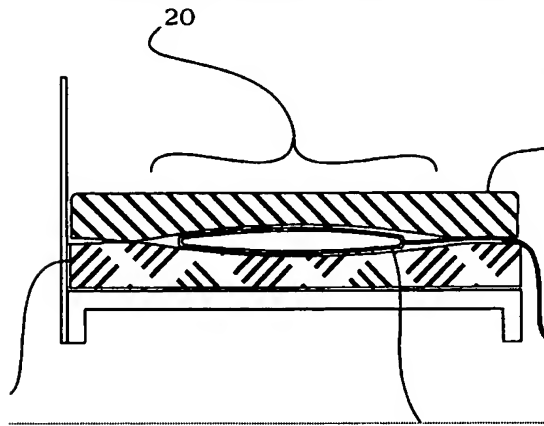


Figure 9



Figure 10

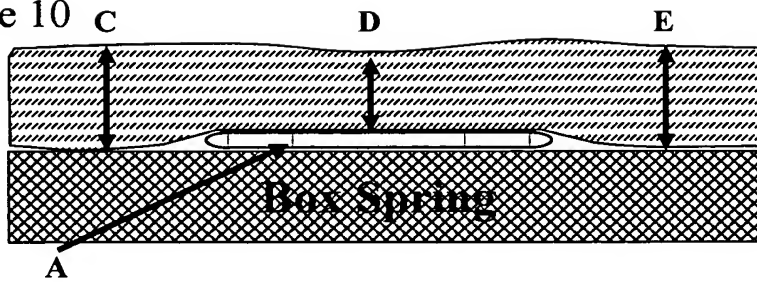


Figure 11

